

IN THE CLAIMS

1-5. (canceled)

6. (previously presented) A pulse detonation system for a gas turbine engine, said pulse detonation system configured to create a temperature rise and a pressure rise within the gas turbine engine and to increase gas turbine engine thrust, said pulse detonation system comprising:

at least one deflagration chamber radially outward from an engine exhaust centerbody; and

a detonation chamber downstream from and in flow communication with said deflagration chamber, said detonation chamber configured to detonate a fuel mixture.

7. (original) A pulse detonation system in accordance with Claim 6 wherein said pulse detonation system is downstream from a core engine powering the gas turbine engine.

8. (canceled)

9. (canceled)

10. (previously presented) A pulse detonation system in accordance with Claim 6 further comprising a reversed flap configured to translate axially from a first position during a first engine operating mode to a second position during a second engine operating mode.

11. (canceled)

12. (original) A pulse detonation system in accordance with Claim 6 wherein said deflagration chamber is annular and extends circumferentially around the engine exhaust centerbody.

13. (original) A pulse detonation system in accordance with Claim 6 wherein said at least one deflagration chamber comprises a plurality of deflagration chambers spaced circumferentially around the engine exhaust centerbody.


14. (previously presented) A gas turbine engine comprising:

an inlet portion;

an exhaust portion positioned co-axially with said inlet portion;

a centerline axis of symmetry;

an exhaust centerbody concentrically aligned with said exhaust portion and extending axially along said centerline axis of symmetry into said exhaust portion; and



a pulse detonation system positioned between said inlet portion and said exhaust portion, said pulse detonation system configured to create a temperature rise and a pressure rise within said engine and to increase engine thrust, said pulse detonation system comprising:

at least one deflagration chamber radially outward from said engine exhaust centerbody; and

a detonation chamber downstream from and in flow communication with said at least one deflagration chamber, said detonation chamber configured to detonate a fuel-air mixture.

15. (original) A gas turbine engine in accordance with Claim 14 further comprising a core engine configured to power said engine, said centerbody extending downstream from said core engine, said pulse detonation downstream from and in flow communication with said core engine.

16. (original) A gas turbine engine in accordance with Claim 15 wherein said at least one pulse detonation system deflagration chamber is annular and extends circumferentially around said engine centerbody.

17. (original) A gas turbine engine in accordance with Claim 15 wherein said at least one pulse detonation system deflagration chamber comprises a plurality of deflagration chambers spaced circumferentially around said engine centerbody.

18. (original) A gas turbine engine in accordance with Claim 15 wherein said centerbody configured to translate axially from a first position during a first mode of engine operation, and a second position during a second mode of operation.

19. (canceled)

20. (previously presented) A gas turbine engine in accordance with Claim 15 wherein said pulse detonation system further comprises a reversed flap configured to translate axially from a first position during a first engine operating mode to a second position during a second engine operating mode.

